

**Notice of Allowability**

Application No.

10/698,151

Examiner

David A. Reifsnyder

Applicant(s)

BEAUPRE, RUDOLPH T.

Art Unit

1723

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the Interview of 3/8/06 and the communications filed on 2/28/06 and 1/17/06.
2. ☒ The allowed claim(s) is/are 1-12 (re-numbered claims 1, 2, 4-12 and 3, respectively).
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
  1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying Indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date 1/17/06
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_.
7. ☒ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_.

## **EXAMINER'S AMENDMENT/COMMENT**

### **EXAMINER'S AMENDMENT**

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

The application has been amended as follows:

Authorization for this examiner's amendment was given in a telephone interview with Richard R. Michaud on March 10, 2006. The examiner's amendment is being done to correct 35 USC 112, 2<sup>nd</sup> paragraph type problems and grammatical problems. See the bellow Examiner's Amendment to claims 1-11.

### ***In The Claims***

1. (Currently amended) A water boiler system for producing an output of hot water or steam, said system comprising:

a boiler for containing a body of water to be heated having an upper portion and a bottom portion ;

a heating means for heating the body of water in the boiler ;

an outlet conduit in which hot water or steam evolving from the body of water is dischargeable from the boiler ;

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a supply conduit through which supply water ~~can be~~ is directly or indirectly added to the ~~upper portion of~~ body of water contained by the boiler; ;

a device associated with the supply conduit for exposing supply water passing through the supply conduit to oscillating electromagnetic flux to induce the formation of particulates in the supply water [, the boiler having a bottom portion to] which [particulates in the body of water tend to] settle by gravity to the bottom portion of the boiler; ;

an outlet for continuously draining water containing the settled particulates from the bottom portion of the boiler ~~,structure and~~

a means for continuously centrifugally separating the drained water containing the settled particulates into separated particulates and cleansed water ; ; and

a means for continuously returning the cleansed water to the boiler ~~structure~~.

2. (Currently amended) A water boiler system as defined in claim 1, wherein said system further includes a means for periodically purging the separated particulates from the ~~structure and~~ means for continuously centrifugally separating.

3. (Currently amended) A water boiler system as defined in claim 1, wherein the cleansed water from the ~~structure and~~ means for continuously centrifugally separating is returned to the bottom portion of the boiler.

4. (Currently amended) A water boiler system as defined ion claim 1, wherein said water boiler includes firetubes ~~a firetube boiler~~.

5. (Currently amended) A water boiler system as defined in claim 4, wherein said cleansed water is returned to the bottom portion of the ~~firetube~~ boiler.

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6. (Currently amended) A water boiler system as defined in claim 1, wherein said boiler structure includes watertubes ~~a watertube boiler~~.

7. (Currently amended) A water boiler system as defined in claim 6, wherein said ~~watertube~~ boiler includes an upper steam drum and a lower mud drum, and said cleansed water is returned to the steam drum of the watertube boiler.

8. (Currently amended) A water boiler system as defined in claim 1, wherein said device for exposing supply water passing through the supply conduit to oscillating electromagnetic flux is one whereby the electromagnetic flux is applied to the supply water in ~~the form of~~ repetitive bursts of ringing electromagnetic flux.

9. (Currently amended) A water boiler system as defined in claim 8, wherein said device for exposing the supply water passing through the supply conduit to oscillating electromagnetic flux utilizes two coils wherein fluxes produced by the two coils move in opposite directions through the supply water liquid.

10. (Currently amended) A hot water boiler system as defined in claim 1, wherein a the supply conduit is ~~conditioned~~ designed to add the supply water ~~to the system by introducing the supply water~~ directly to the body of water contained by the boiler.

11. (Currently Amended) A water boiler system as defined in claim 1, wherein the supply conduit is designed to add the supply water ~~to the system by introducing a supply water~~ directly to the means for continuously centrifugally separating ~~along with~~ the drained water containing the settled particulates.

12. (Original) A water boiler system as defined in claim 2, wherein said means for periodically purging the separated particulates from the means for continuously centrifugally separating includes a timer controlled valve.

### ***Drawings***

The formal drawings filed on October 31, 2003 are approved by the Examiner.

### **EXAMINER'S COMMENT**

***The Examiner fails to understand the applicant's concerns about the 35 USC 112 6<sup>th</sup> paragraph Analysis. Furthermore, while the Examiner feels that analysis was proper he has replaced that analysis with the bellow 35 USC 112 6<sup>th</sup> paragraph Analysis. The recitation of "and the only specific example of a mechanical separator is a centrifuge. Furthermore, the specification fails to teach a preferred centrifuge; however, the drawings implies that the preferred centrifuge is a hydrocyclone" has been deleted and certain words have been underlined and formatted in bold print to better show that the 35 USC 112 6<sup>th</sup> paragraph Analysis is quite broad.***

### ***35 USC 112 6<sup>th</sup> paragraph Analysis***

The structural equivalent of the "means for continuously draining water with settled particulates from the bottom portion of the boiler structure", is **any structure that**

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can drain water, because the specification **broadly** teaches a drain line for continuously draining water with settled particulates from the bottom of a boiler.

The structural equivalent of the “means for continuously mechanically separating the drained water with settled particulates from the bottom portion of the boiler structure”, is **any structure that can mechanically separate drained water with settled particulates from the bottom of a boiler**, because the specification **broadly** teaches a mechanical separator for draining water with settled particulates from the bottom of a boiler.

The structural equivalent of the “means for continuously returning the cleansed water to the boiler structure”, is **any structure that can return water to a boiler**, because the specification **broadly** teaches a line for continuously returning water to a boiler.


The structural equivalent of the “means for periodically purging the separated particulates from the mechanical separator”, **any structure that can purge particulates from a mechanical separator**, because the specification **broadly** teaches a means for periodically purging the separated particulates from a mechanical separator.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David A. Reifsnyder whose telephone number is (571) 272-1145. The examiner can normally be reached on M-F 9:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda M. Walker can be reached on (571) 272-1151. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
David A Reifsnyder  
Primary Examiner  
Art Unit 1723

DAR